

Original Article

Sedentary Lifestyle with Social Interaction in Adolescent

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ABSTRACT

Background: Sedentary lifestyle is problematic among millennial generation teenagers. One of the factors is that technological advances in the 4.0 era are very rapid, especially the use of technology such as television, computers, gadgets, and the internet. The purpose of this study was to determine the relationship between Sedentary Lifestyle and Social Interaction in Adolescents at SMP 1 Sudimoro.

Methods: The design of this research is the correlation with approach cross-sectional, the sample is 30 respondents, the sampling technique is total sampling. The independent variable in this study is a sedentary lifestyle, while the dependent variable in this study is social interaction. The measuring instrument used is a questionnaire. This study was analyzed using the Spearman Rank Test.

Results: The results showed that most (76.7%) experienced a Sedentary Lifestyle in the moderate category, and most (83.3%) social interactions in the maladaptive category. Based on the spearman's rho test, a p-value of 0.033 ($\alpha < 0.05$) was found, meaning that there was a relationship between a sedentary lifestyle and social interaction among adolescents at SMPN 1 Sudimoro. Interaction mediated by screen-based behavior does not teach healthy social skills to adolescents.

Conclusion: They are more comfortable and willing to spend more time interacting with their friends in cyberspace. It is recommended for parents to always provide direction and monitoring on the use of media screens in adolescents, as well as reducing a sedentary lifestyle.

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Introduction

Sedentary lifestyle (behavior) is a problematic event that is experienced by many Indonesian people today, especially among millennial generation teenagers. Sedentary behavior has a negative effect on health, thus making it an important issue in public health (Ochoa, et al., 2013). Screen-based behavior is a part of a sedentary lifestyle that makes a person complacent with screen time so that they behave lazily to

move, are apathetic, and withdraw from social life and interpersonal relationships. In a study conducted by WHO, (2019) 4 out of 5 adolescents around the world are sedentary behavior and socialize. This finding is based on a survey of 1.6 million students in 146 countries and territories stating that 81% of adolescents aged 11-17 years do not do light to moderate physical activity for at least one hour a day, due to spending a lot of time in front of electronic devices. This electronic revolution is

troubling because it changes the movement patterns of teenagers and encourages them to sit more and be less active (sedentary behavior) which is associated with mental and social health. The results of Cahyani's research, (2012) showed that of the 86 adolescents involved, 17.4% had sufficient moderate level of exercise activity, 30.2% had sufficient strenuous exercise activity and 100.0% had sufficient moderate and heavy level activity. Based on the [Ludyanti Journal, \(2019\)](#), the study described sedentary behavior as much as 89.5% have the habit of watching television, 100% have the habit of working with computers or laptops, 26.7% have the habit of playing video games, 100.0% have the habit of sitting, 48.8% of adolescents had poor sleep duration. The Indonesian Ministry of Health, (2019) explained that the Indonesian people are considered less mobile, even in the last 5 years the number has increased. The results of the 2018 Basic Health Research ([Riskesmas, 2018](#)) show that the number of Indonesians who lack physical activity (sedentary behavior) increased from 26.1% in 2013 to 33.5% in 2018. In East Java, the prevalence of inactivity was 26.5 % in 2018. Meanwhile, in the Pacitan Regency, the prevalence of the application of PHBS indicators, namely physical activity, is only 44%. Based on the data on the number of students in grades 8A, B, C, and D, 100 students were found. The results of interviews with 20 students found that 20 students experienced sedentary lifestyles moderate to high and experienced social interaction disorders in the maladaptive category. (Sedentary behavior) associated with mental and social health. The results of Cahyani's research, (2012) showed that of the 86 adolescents involved, 17.4% had sufficient moderate level of exercise activity, 30.2% had sufficient strenuous exercise activity and 100.0% had sufficient moderate and heavy level activity. Based on the Ludyanti

Journal, (2019), the study described sedentary behavior as much as 89.5% have the habit of watching television, 100% have the habit of working with computers or laptops, 26.7% have the habit of playing video games, 100.0% have the habit of sitting, 48.8% of adolescents had poor sleep duration. The Indonesian Ministry of Health, (2019) explained that the Indonesian people are considered less mobile, even in the last 5 years the number has increased. The results of the 2018 Basic Health Research (Riskesmas) show that the number of Indonesians who lack physical activity (sedentary behavior) increased from 26.1% in 2013 to 33.5% in 2018. In East Java, the prevalence of inactivity was 26.5 % in 2018. Meanwhile, in the Pacitan Regency, the prevalence of the application of PHBS indicators, namely physical activity, is only 44%. Based on the data on the number of students in grades 8A, B, C, and D, 100 students were found. The results of interviews with 20 students found that 20 students experienced sedentary lifestyles moderate to high and experienced social interaction disorders in the maladaptive category.

A sedentary lifestyle is a group of behaviors that occur when sitting or lying down that requires very low energy expenditure, such as sitting or lying down while watching television, playing electronic games, reading, and so on ([Arundhana et al., 2016](#)) ([Arundhana et al., 2016](#); [Atkin et al., 2015](#); [Yusfita, 2018](#); [Zakiyatul Fuadah et al., 2021](#)). One of the impacts that can be caused by sedentary behavior is social interaction disorder (Cliff et al., 2016) Social interaction is one aspect in the process of growth and development of adolescents. Erickson said children who are experiencing development need interaction with those around them that can create self-confidence in adolescents. The decrease in social interaction in adolescents occurs due to one of the

phenomena of screen-based behavior. Teenagers seem to have a world of their own. Adolescents who experience more sedentary behavior will spend more time playing alone, move less and interact less with the outside environment

The use of the internet as a communication medium is also developing very rapidly. The limitations of distance and the busyness of different people are no longer an obstacle to communicating with each other. Currently, communication can be done with the help of social media intermediaries. Hidayatun (2015) mentions social media as an online media where users can socialize and interact without being limited by space and time so that teenagers spend more screen time

Adolescent social development is a progressive change in the organism in this context, early adolescents who have experienced puberty, begin to think about around or around them (social context) and express their emotions either in behavior or not. Social development in adolescents develops because of the encouragement of curiosity about everything that is in the world around them.

Efforts in dealing with a sedentary lifestyle are that parents are always vigilant and involved in actively monitoring the development of adolescents. In addition, parents must keep up with the times because electronic media already exists and will continue to progress. Efforts in dealing with sedentariness. Adolescents who are in their developmental stage in dire need of quality social interaction, actually experience obstacles due to the decline in the quality of social interaction. A lot of adolescent time is spent on screen-based behavior (Tremblay et al., 2011). According to Sarvamangala & Sharmista (2016), there are indications that interactions mediated by screen-based

behavior do not teach healthy social skills, especially for children and adolescents.

Method

The research design used correlation with a cross-sectional approach. The sampling technique used purposive sampling with the number of respondents as many as 30 students according to the inclusion criteria. The study was conducted in May 2021. The data were then analyzed using the Rho Spearmen Test.

Results

Data presented include age, learning methods, hobbies, means of transportation, conflicts that are often faced, while special data will present data on sedentary lifestyle, social interaction, and analysis results.

Table 1. Age, learning methods, hobbies, means of transportation, conflicts that are often faced by teenagers

N o	Characteristics of Respondents	Frequency (f)	Percentage (%)
1	Age		
	14 years	27	90
	15 years	3	10
	Total	30	100
2.	learning methods		
	Online at home	30	100
	At school	-	-
	Total	30	100
3	Hobby or habit		
	watching TV	5	16,7
	Games	10	33.3
	Reading books	5	16.7
	Main social media	10	33.3
	Total	30	100

N o	Characteristics of Respondents	Frequ ency (f)	Perce ntage (%)
4	Transport used		
	Motor	22	73.3
	Cars	2	6.7
	Bicycles	6	20
	Total	30	100
5	Conflict environment (related to social interaction)		
	None	20	66.7
	Available with teachers	1	3.3
	Some with parents	2	6.7
	Some with friends	7	23.3
	Total	30	100
6	Communication with closest people		
	Using telephones	19	63,3
	Direct contact	11	36.7
	Total	30	100

Table 2. Tabulation of *Sedentary Lifestyle* for Adolescents at SMP 1 Sudimoro in 2021.

Se de nt ar y Lif est yle	Fr e q u e n c y	Pe r c e n t a g e
	(f)	(%)

Low	1	3
Medium	23	76
High	6	20
Total	30	100

Table 2. Tabulation of Social Interaction among Adolescents at SMP 1 Sudimoro in 2021.

Social Interaction	Frequency (f)	Percentage (%)
Adaptive	5	16.7
Maladatif	25	83.3
Total	30	100

Table 3. Tabulation of the Relationship between *Sedentary Lifestyle* and Social Interaction at Adolescent Age at SMP 1 Sudimoro in 2021.

<i>Sedentary Lifestyle</i>	Social Interaction			
	Adaptive		Maladaptive	
	f	%	f	%
Low	-	-	1	3.3
Medium	4	13.3	19	76.7
High	1	3.3	5	20
Total (N)	5	16.7	25	83.3
Spearman's rho test	P value = 0.033 < = 0.05			

The results showed that almost all (90%) of the respondents were 14 years old. All (100%) respondents apply online learning methods at home. Almost half (33.3%) of respondents have a hobby or habit of playing games and social media.

Almost all of the respondents (73.3%) used motorbikes for transportation. Most (66.7%) respondents do not have conflicts with the people around them. Most (63.3%) of respondents communicate with their closest people using WhatsApp or telephone. Based on the table above, the results of the study showed that almost all respondents (83.3%) namely 25 respondents experienced maladaptive social interactions, and a small proportion of respondents (16.7%) namely 5 respondents experienced adaptive social interactions. Based on the table, the results of the study showed that most (76.7%) of 20 respondents experienced a Sedentary Lifestyle in the moderate category. Meanwhile, almost all of the respondents (83.3%) experienced social interactions, namely 25 respondents experienced maladaptive social interactions. Based on the spearman's rho test, a p-value of $0.033 < 0.05$ was obtained, which means that there is a relationship between a sedentary lifestyle and social interaction in adolescents at SMPN 1 Sudimoro. The closeness of the relationship in this study is 0.083 (in the category of weak relationship).

Discussion

Adolescents, in this case, students, are in the process of moving towards maturity, the mindset of teenagers who tend to be open is easier to accept innovative new things than parents. Adolescence is the age where interaction and communication with new people around them are intense, and the use of smartphones has an impact on sedentary behavior, both negative and positive in social interactions (Noor 2014 and Le Blanc et al., 2012).

The ownership of the smartphone makes accessing social networking sites very easy for them, allowing them to make

new friends easily, and interactions are often done through social networking. Based on the problems, phenomena, conditions, and reality of the relationship between smartphone use and social interaction, smartphone addicts unwittingly lose the ability to live together and also reduce direct social interaction and cause us to tend to apply a sedentary lifestyle (Firdaus et al., 2015).

A sedentary lifestyle is a group of behaviors that occur when sitting or lying down that requires very low energy expenditure, such as sitting or lying down while watching television, playing electronic games, reading, and so on (Arundhana et al., 2016). One of the impacts that can be caused by sedentary behavior is social interaction disorder (Cliff et al., 2016). Social interaction is one aspect of the process of growth and development of adolescents. Erickson said children who are experiencing development need interaction with those around them that can create self-confidence in adolescents. The decrease in social interaction in adolescents occurs due to one of the phenomena of screen-based behavior. Teenagers seem to have a world of their own. Adolescents who experience more sedentary behavior will spend more time playing alone, move less and interact less with the outside environment (Ludyanti, 2019; Sousa & Silva, 2017).

The impact on social interaction will of course also affect the behavior of adolescents both individually and to others. Adolescents will tend to be less independent, more emotional, aggressive, difficult to communicate and get along with other friends, spoiled behavior, destructive behavior, and difficulty concentrating (Arundhana et al., 2016). Teenagers will often look busy with smartphones, games, television, and social media until someone doesn't realize or doesn't care about the presence of other people in front of them.

Adolescent social development is a progressive change in the organism in this context, early adolescents who have experienced puberty, begin to think about their surroundings (social context) and express their emotions either in behavior or not. Social development in adolescents develops because of the encouragement of curiosity about everything that is in the world around them. This is defined as the way teenagers react to the people around them and how it affects them (Afandi et al., 2021; Bian & Leung, 2015; Fitri, 2007).

Conclusion

There is a relationship between a sedentary lifestyle and social interaction among adolescents aged 14-15 years at SMPN 1 Sudiomoro. For further researchers who want to continue research on the relationship between a sedentary lifestyle and social interaction in adolescents aged 14-15 years at SMPN 1 Sudiomoro, they can add research variables as comparisons in research. In addition, the addition of respondents will also provide much better research results in proving a study.

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